

Department of Defense CGSIC Update

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Overview

- Policy Review Mr. Swider
- GPS Modernization Lt Col
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- Constellation Sustainment Capt Pappas
- Questions and Answers



Goal of GPS Modernization Changes

- Increased capability for military and civil users
 - Military
 - Add new signals and increased signal power to improve Navwar capability
 - Civil
 - Add new signals to improve accuracy and signal redundancy



GPS Modernization Program

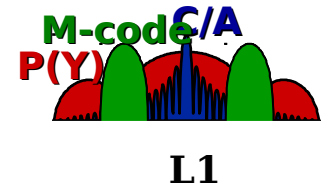
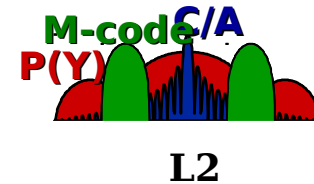
Navwar Capability While Providing Civil Enhancements

- **Protection** of service for US/Allied forces
 - Add more powerful military ranging signals to Block IIF satellites
 - Modify select platforms to detect and locate GPS jamming
 - Develop and field improved anti-jam and security technologies
- **Prevention** of adversary exploitation
 - Spectrally separate new military signals from civil signals
 - Modify select platforms to accomplish mission
- **Preservation** of civil use while providing enhancements
 - Add C/A on L2 to IIR satellites
 - Add C/A on L2 to Block IIF satellites
 - Add L5, safety of life signal to Block IIF satellites

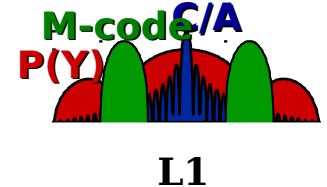
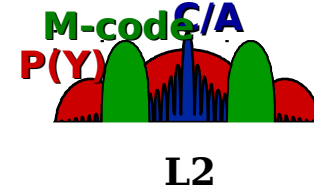
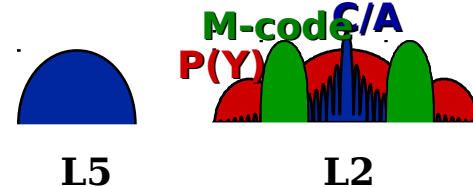


Proposed GPS Space Segment

- Block IIRs (12 SV's)
 - Adds C/A to L2
 - Adds new military M-Code
 - Increases signal power



- Block IIFs



- Adds civil L5 to all
- Pursue optimum approach for +20db M-code power increase

GPS Modernization plan meets White House announcements of adding new civil services while implementing spectrally separated military services earlier



Projected Launch Dates

- C/A on L2 first launch in FY 03
- Earth coverage M-code first launch in FY 03
- L5 first launch in FY 05



Selective Availability (SA) Policy

- Presidential Decision Directive (PDD) NTSC-6 (March 28, 1996)
 - Intention of US to discontinue the use of SA by 2006.
 - Beginning in 2000, President will make an annual assessment and determination on the continued use of SA
 - To support determination, SecDef will provide President with assessment and recommendation on SA use.
- The first annual assessment of SA is underway



Biennial Congressional Report on GPS

- The 1998 DoD Appropriations act directs the SecDef to submit report on GPS not later than October 30, 2000. Report to address:
 - The operational status of system
 - Capability of the system to effectively satisfy military and civil requirements.
 - SA discontinuance assessment status.
 - The status of international activities to promote GPS.
 - Progress made toward protecting GPS from disruption and interference.
 - Effects of use of the system on national security, regional security, and the economic competitiveness of United States industry.



Biennial Congressional Report on GPS

- OSD (C3I) has lead in preparing report
- Inputs from DOT, State, Air Force Space Command, and GPS Joint Program Office
- First draft to be circulated for comment in late June